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Information Disclosure Statement by Applicant

JAN 0 7 2005
See several sheets if necessary)

Attorney's Docket No. 10559-154001

Application No. 09/539,343

Applicant Dean P. Macri et al.

Filing Date Group Art Unit March 31, 2000

Group Art Unit 2672

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U.S. Patent Documents							
Examiner	Desig.	Document	Publicatio	nt Documents	1		Filing Date
Initial/	ID ID	Number	n Date	Patentee	Class	Subclass	If Appropriate
9100	AA	4,600,919	07-1986	Stern			
\mathcal{V}	AB	4,747,052	05-1988	Hishinuma et al.			
	AC	4,835,712	05-1989	Drebin et al.			
	AD	4,855,934	08-1989	Robinson			
	AE	4,901,064	02-1990	Deering			
	AF	5,124,914	06-1992	Grangeat			
	AG	5,163,126	11-1992	Einkauf et al.			
	AH	5,371,778	12-1994	Yanof et al.			
	AI	5,611,030	03-1997	Stokes			
	AJ	5,731,819	03-1998	Gagne et al.			
	AK	5,757,321	05-1998	Billyard			
	. AL	5,786,822	07-1998	Sakaibara			
	AM	5,805,782	09-1998	Foran			
	AN	5,809,219	09-1998	Pearce et al.			
	AO	5,812,141	09-1998	Kamen et al.			
	AP	5,847,712	12-1998	Salesin et al.			
	AQ	5,894,308	04-1999	Isaacs			
	AR	5,929,860	07-1999	Норре			
	AS	5,933,148	08-1999	Oka et al.			
	AT	5,949,969	09-1999	Suzuoki et al.			
	AU	5,966,133	10-1999	Норре			
	AV	5,966,134	10-1999	Arias			
	AW	5,974,423	10-1999	Margolin			
	AX	6,054,999	04-2000	Strandberg			
	AY	6,057,859	05-2000	Handelman et al.			
	AZ	6,078,331	06-2000	Pulli et al.			
	AAA	6,115,050	09-2000	Landau et al.			

Examiner Signature W. Lord - Whyson	Date Considered
EXAMINER: Initiats citation considered. Draw line through citation next communication to applicant.	if not in conformance and not considered. Include copy of this form with
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U.S. Department of Commerce Patent and Trademark Office Substitute Form PTO-1449 Attorney's Docket No. Application No. (Modified E 10559-154001 09/539,343 Applicant Information Disclosure Statement by Applicant several sheets if necessary) Dean P. Macri et al. JAN 0 7 2005 (UK Filing Date Group Art Unit 2672 2677 March 31, 2000

FRACE	U.S. Patent Documents							
Examiner	Desig.	Document	Publicatio				Filing Date	
Initial/	ID	Number	n Date	Patentee	Class	Subclass	If Appropriate	
111214	ABB	6,175,655	01-2001	George et al.				
	ACC	6,191,787	02-2001	Lu et al.				
	ADD	6,191,796	02-2001	Tarr				
	AEE	6,198,486	03-2001	Junkins et al.				
	AFF	6,201,549	05-2001	Bronskill				
	AGG	6,208,347	03-2001	Migdal et al.		}		
	АНН	6,219,070	04-2001	Baker et al.				
	AII	6,239,808	05-2001	Kirk et al.				
	AJJ	6,252,608	06-2001	Snyder et al.				
	AKK	6,262,737	07-2001	Li et al.				
	ALL	6,262,739	07-2001	Migdal et al.				
	AMM	6,292,192	09-2001	Moreton				
	ANN	6,317,125	11-2001	Persson				
	AOO	6,337,880	01-2002	Cornog et al.	(
	APP	6,388,670	05-2002	Naka et al.				
	AQQ	6,405,071	06-2002	Analoui	-			
	ARR	6,437,782	08-2002	Pieragostini et al.				
	ASS	6,478,680	11-2002	Yoshioka et al.				
	ATT	6,559,848	05-2003	O'Rourke		·		
	AUU	6,593,924	07-2003	Lake et al.				
	AVV	6,593,927	07-2003	Horowitz et al.		>		
	AWW	6,608,627	08-2003	Marshall et al.				
	AXX	6,608,628	08-2003	Ross et al.				
	AYY	2001/0026278	10-2001	Arai et al.				
	AZZ	2002/0101421	08-2002	Pallister				

Foreign Patent Documents or Published Foreign Patent Applications							
Examiner	Desig.	Document	Publication	Country or	Class	Subclass	Translation
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Substitute Form PTO-144	9 U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10559-154001	Application No. 09/539,343			
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	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	
Initial	ID	Document Alliez et al., "Progressive Compression for Lossless Transmission of Triangle
1 With	ABBB	Meshes," ACM SIGGRAPH 2001, pgs. 195 - 202 (2001).
1		Appel, Arthur, "The Notion of Quantitative Invisibility and the Machine Rendering
1 1	ACCC	of Solids." Proceedings of 22nd National Conference Association for Computing
		Machinery 1967.
	ADDD	Bajaj et al., "Progressive Compression and Transmission of Arbitrary Triangular
<u> </u>	ADDD	Meshes," <u>IEEE</u> , pgs. 307 - 316 (1999).
	AEEE	Buck et al., "Performance-Driven Hand Drawn Animation", ACM (NPAR2000),
		pgs. 101 - 108 (2000).
	AFFF	Catmull et al., "Recursively Generated B-Spline Surfaces on Arbitrary Topological
		Meshes," Computer Aided Design, 10(6):350 - 355 (1978).
	AGGG	Chow, M., "Optimized Geometry Compression for Real-time Rendering," IEEE,
		pgs. 347-354 (1997).
	АННН	Coelho et al., "An Algorithm for Intersecting and Trimming Parametric Meshes",
		ACM SIGGRAPH, pgs. 1 - 8 (1998). Cohen-Or, D. et al., "Progressive Compression of Arbitrary Triangular Meshes,"
	AIII	<u>IEEE Visualization 99</u> Conference Proc., pgs. 67 - 72 (1999).
		Deering, M., "Geometry Compression," Computer Graphics. SIGGRAPH '95,
	AJJJ	pages 13-20, 1995.
		DeRose et al., "Subdivisional Surfaces in Character Animation", ACM,
	AKKK	SIGGRAPH'98, pgs. 85 - 94 (1998).
		Dyn, N. et al., "A Butterfly Subdivision Scheme for Surface Interpolation with
	ALLL	Tension Control," ACM Transactions on Graphics, 9(2):160 - 169 (1990).
	AMMM	Elber, Gershon, "Line Art Rendering via a Coverage of Isoperimetric Curves,"
	AMMININ	IEEE Transactions on Visualization and Computer Graphics, 1(3):231 - 239 (1995).
	ANNN	Elber, Gershon, "Interactive Line Art Rendering of Freeform Surfaces",
	AUU	Eurographics'99, 18(3):C1 - C12 (1999).
		Gooch et al., "A Non-Photorealistic Lighting Model for Automatic Technical
	A000	Illustration," Computer Graphics Proceedings, Annual Conference Series,
		<u>SIGGRAPH'98</u> , pgs. 447-452 (1998).
}	APPP	Gooch et al., "Interactive Technical Illustration," ACM Interactive 3D, pgs. 31 - 38
<i>\</i>		(1999).

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A THADE	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
ANN	AQQQ	Heidrich et al., "Realistic, Hardware-Accelerated Shading and Lighting," ACM, (SIGGRAPH'99), pgs. 171 - 178 (1999).
p	ARRR	Hoppe, H., "Progressive Meshes," URL: http://www.research.microsft.com/research/graphics/hoppe/, (10 pgs.).
	ASSS	Hoppe, H., "Efficient Implementation of Progressive Meshes," Comput. & Graphics, 22(1), pgs. 27 - 36 (1998).
	ATTT	Hoppe, H., "View-Dependent Refinement of Progressive Meshes", URL: http://www.research.microsoft.com/~hoppe/ (10 pgs.).
	AUUU	Kumar et al., "Interactive Display of Large Scale NURBS Models", <u>ACM</u> , Symp. On Interactive 3D Graphics, pgs. 51 - 58 (1995).
	AVVV	Lake et al., "Stylized Rendering Techniques for Scalable Real-Time 3D Animation", NPAR, pgs. 101 - 108 (2000).
	AWWW	Lander, Jeff, "Making Kine More Flexible," Game Developer Magazine, 5 pgs., November 1998.
	AXXX	Lander, Jeff, "Skin Them Bones," Game Developer Magazine, 4 pgs., May 1998.
	AYYY	Lansdown et al., "Expressive Rendering: A Review of Nonphotorealistic Techniques," IEEE Computer Graphics & Applications, pgs. 29-37 (1995).
	AZZZ	Lasseter, J. et al., "Principles of Traditional Animation Applied to 3D Computer Animation," ACM, pgs. 35 - 44 (1987).
	AAAAA	Lee, M. et al., "Navigating Through Triangle Meshes Implemented as Linear Quadtrees," ACM Transactions on Graphics, 19(2):79 - 121 (2000).
	ABBBB	Lewis, J. P. et al., "Pose Space Deformation: A Unified Approach to Shape Interpolation and Skeleton-Driven Deformation," <u>ACM</u> , (SIGGRAPH 2000), pgs. 165 - 172 (2000).
	ACCCC	Ma et al., "Extracting Feature Lines for 3D Unstructured Grids," IEEE, pgs. 285 - 292 (1997).
	ADDDD	Markosian, L. et al., "Real-Time Nonphotorealistic Rendering," SIGGRAPH'97, 6 pgs. (1997).
	AEEEE	Pajarola et al., "Compressed Progressive Meshes" <u>IEEE Transactions on Visualization and Computer Graphics</u> , 6(1):79 - 93 (2000).
	AFFFF	Pedersen, "A Framework for Interactive Texturing on Curved Surfaces", <u>ACM</u> , pgs. 295 - 301 (1996).
	AGGGG	"pmG Introduces Messiah: Animate 3.0", URL: http://www.digitalproducer.com/aHTM/Articles/july_2000/july_17_00/pmg_intros messiah_animate.htm (Accessed 10/26/2004) 2 pgs.
		14. 04

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Substitute Form PTO-1449 (Modified)P	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10559-154001	Application No. 09/539,343	
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	MEZ.	
IMAU	Other D	ocuments (include Author, Title, Date, and Place of Publication)
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Initial	ID	Document Document
KM MA	АННН	Popovic et al., "Progressive Simplicial Complexes" Microsoft Research,
HWY		http://www.research.microsft.com/~hoppe/
$1 \cdot 10$	AIIII	Pueyo, X. et al., "Rendering Techniques '96," Proc. of Eurographics Rendering
		Workshop 1996, EUROGRAPHICS, p[gs. 61 - 70 (1996).
1 1	AJJJJ	Raskar, R. et al., "Image Precision Silhouette Edges," Symposium on Interactive
		3D Graphics, <u>ACM</u> , pgs. 135-231 (1999)
		Rockwood, A. et al., "Real-time Rendering of Trimmed Surfaces," Computer
1	AKKKK	Graphics (SIGGRAPH '89 Proceedings) 23:107 - 116 (1989).
 		
		Samet, Hanan, "Applications of Spatial Data Structures: Computer Graphics, Image
	ALLLL	Processing, and GIS," University of Maryland, Addison-Wesley Publishing
		Company, 1060-1064, Reading, MA, June 1990
}	AMMMM	Sousa, M., et al., "Computer-Generated Graphite Pencil Rendering of 3-D
		Polygonal Models", Eurographics'99, 18(3):C195 - C207 (1999).
1 1		Stam, J., "Exact Evaluation of Catmull-Clark Subdivision Surfaces at Arbitrary
	ANNNN	Parameter Values", SIGGRAPH 98 Conference Proceedings, Annual Conference
		Series, pgs. 395-404 (1998).
	A0000	radom of an, 3D Goombary Compression, Studies 1170 Course Notes (1998).
	APPPP	Taubin et al., "Progressive Forest Spilt Compression," IBM T.J. Watson Research
	AFFFF	Center, 9 pgs. (1998).
	AQQQQ	Thomas (Contributor) et al., "The Illusion of Life: Disney Animation" 47-51
		Wilhelms, J. & Van Gelder, A., "Anatomically Based Modeling," Univ. California
] }	ARRRR	
		<url: courses="" cs448-01-spring="" graphics.stanford.edu="" http:="" papers="" wilhelms.pdf="">.</url:>
		Zeleznik et al., "SKETCH: An Interface for Sketching 3D Scenes" Brown
\	ASSSS	University site of the NSF Science and Technology Center for Computer Graphics
	<u> </u>	and Scientific Visualization, 1996
	ATTTT	Zorin "Interpolation Subdivision for Meshes With Arbitrary Topology" Department
	AIIII	of Computer Science, California Institute of Technology, Pasadena, CA
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